

REMARKS

35 USC §103

Claims 1-2, 4-6, 8-14, 16-24 and 32 are rejected under 35 USC §103(a) as being unpatentable over JP 01096374.

Claims 21-24 are rejected under 35 USC §103(a) as being unpatentable over JP 10287939, JP 03072043, JP 04165037 or JP 01096374.

The Applicant respectfully disagrees, especially in view of the amendments presented herein.

First, the rejection of claims 5, 8-11, 13-14, 16-24 and 32 is moot based on the amendments presented herein. The remaining claims from the previous response are 1, 2, 4, 6 and 12.

The Examiner I believe appreciates the fact that different alloys are being created to have different characteristics and properties. A description of this concept is found in the current original application at paragraphs 22 and 23, which the Applicants respectfully ask the Examiner to review in detail. Therefore, it is important when certain metals and components are added or left out – and thus, the concept of an alloy cannot be generalized to say that any combination of three metals will accomplish the same goal as three other metals or components.

While the Examiner believes that once a certain alloy is disclosed that all other related alloys including any element on the periodic chart are obvious – the mere citation of several references with different, but related, alloys proves the point that they aren't all the same. Different elements combined with tin or copper provide different alloys with different properties.

Second, the Examiner's comment regarding one of ordinary skill in the art just picking and choosing among all of the elements to add to a sputtering target is again considered an overstatement. In all of the cited references, different groups of elements

are added to achieve different results – whether it's corrosion resistance, adhesion to other layers, electrical discharge characteristics, etc. Therefore, one of ordinary skill in the art is going to choose those elements that work in concert with copper and tin to achieve the desired results for the sputtering target (lack of warpage, ability to withstand heat) or the sputtered layer (ability to adhere, not corrode, have increased electrical properties, etc.).

All of this information being said, the Applicant herein amends claim 1 to show that the first added element is tin. The second, and in some cases, the third added elements are designed to work with tin to provide a copper sputtering target that is superior to those in the cited art. In addition, all of the references teach different combinations of elements but none of the references teach, disclose or suggest a copper target comprising tin as a first added element, along with a second added element from the group consisting of Al, As, Au, B, Cd, Co, Fe, Ga, Ge, Hf, Hg, Ir, Li, Mg, Ni, Pb, Pd, Pt, Sc, Si, V and W; or a third added element selected from the group consisting of Al, As, Au, B, Cd, Co, Fe, Ga, Ge, Hf, Hg, Ir, Li, Mg, Ni, Pb, Pd, Pt, Sc, Si, V and W, wherein the second and third added elements are different from one another.

REQUEST FOR AN INTERVIEW

The Applicants through their undersigned attorney respectfully request an interview with the Examiner to discuss any remaining issues, if the claims are not put in condition for allowance by this response. Dr. Thompson can be reached Monday through Friday at 949-224-6282 from 9AM to 4PM PST. A request for interview form is attached.

REQUEST FOR ALLOWANCE

Claims 1-2, 4, 6, 12 and 33-38 are pending in this application and the Applicant respectfully requests that the Examiner reconsider the claims in light of the arguments presented and allow all pending claims.

Respectfully submitted,

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By:

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